

Food Marketing Costs Rose Less Than the Farm Value in 1995

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Nearly four-fifths of the \$530.8 billion U.S. consumers spent for farm foods (excluding seafood and imports) in 1995 was spent on marketing costs. Food marketing costs are measured by the marketing bill, which represents the difference between the farm value of food produced on U.S. farms and the final cost to consumers at grocery stores and eating places. These costs include labor, packaging, transportation, energy, advertising, and other miscellaneous costs.

Marketing costs posted a small increase of only 3.5 percent in 1995. Although this rise was less than the 5-percent average annual increase of the last decade, it was still higher than the 1995 general inflation rate of 2.8 percent.

In 1995, the farm value rose 4.1 percent. Higher farm values were recorded for all major commodity categories in 1995, with fruits and vegetables posting the largest increases. Higher prices paid to farmers more than offset reduced farm production caused by unfavorable weather conditions.

The farm value percentage measures total farm value as a propor-

tion of food expenditures, and reflects relative changes in both farm value and food expenditures. The farm value accounted for 22 percent of the cost of food in 1995, an increase of 1 percent from 1994. This increase is in marked contrast with the general pattern of the last 50 years, in which the farm value percentage has declined in response to abundant food supplies. These abundant food supplies have restrained farm prices, while rising food processing and distributing charges have boosted retail prices.

In dollar amounts, marketing costs increased \$14.1 billion, while the farm value rose only \$4.5 billion. Thus, marketing costs had a much larger impact on consumer expenditures, even though the farm value percentage increase was higher.

Farm Value Percentages Vary by Food

Farm value percentages vary greatly among foods (table 1). (It should be noted that the farm value percentages for the individual foods in table 1 reflect only grocery store prices, while the aggregate farm values discussed in the rest of this article also include the away-from-home market.) In 1995, the farm value percentage varied from 60

percent for eggs to 4 percent for corn syrup. The percentage generally decreases as the degree of processing increases. For example, wheat is the principal ingredient of both flour and bread, but the additional manufacturing processes required for bread result in a lower farm value percentage of 8 percent of its retail price, compared with 35 percent for flour.

Similarly, the farm value of most food products made from highly processed grains and oilseeds represents a small percentage of the retail price. In 1995, the farm value averaged 7.5 percent of bakery and cereal products at the retail market. Because the farm value of these foods is small, 1995's 2-percent rise in the retail price of cereal and bakery products was caused by higher marketing costs and not by the cost of grains. The farm-to-retail price spread for cereal and bakery products rose 2.9 percent in 1995, while the farm value held steady.

Foods derived from animal products tend to have a higher farm value percentage than those derived from crops. For example, the farm value accounted for 49 percent of the retail price of Choice beef and 53

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Table 1

Farm Value Percentages Vary Greatly by Food

Food	Retail price			Farm value			Farm value percentage of retail price		
	1993	1994	1995	1993	1994	1995	1993	1994	1995
	<i>Dollars</i>			<i>Dollars</i>			<i>Percent</i>		
Animal products:									
Eggs, Grade A large, 1 doz.	0.91	0.86	0.93	0.53	0.50	0.56	58	58	60
Beef, Choice, 1 lb.	2.93	2.83	2.84	1.64	1.46	1.38	56	52	49
Chicken, broiler, 1 lb.	.89	.90	.92	.48	.49	.49	54	54	53
Milk, 1/2 gal.	1.39	1.44	1.43	.58	.61	.58	42	42	41
Pork, 1 lb.	1.98	1.98	1.95	.73	.63	.67	37	32	34
Cheese, natural cheddar, 1 lb.	3.34	3.35	3.39	1.15	1.17	1.16	34	35	34
Fruit and vegetables:									
Fresh—									
Lemons, 1 lb.	1.08	1.11	1.14	.29	.27	.30	27	24	26
Apples, red delicious, 1 lb.	.83	.80	.84	.19	.17	.21	23	21	25
Potatoes, 10 lbs.	3.48	3.74	3.79	.78	.77	.80	22	21	21
Oranges, California, 1 lb.	.59	.56	.62	.13	.11	.12	22	20	19
Grapefruit, 1 lb.	.53	.51	.55	.10	.10	.10	19	20	18
Lettuce, 1 lb.	.66	.61	.80	.12	.12	.18	18	20	23
Frozen—									
Orange juice concentrate, 12 fl. oz.	1.22	1.21	1.21	.40	.46	.48	33	38	40
Broccoli, cut, 1 lb.	1.15	1.16	1.19	.26	.25	.22	23	22	18
Corn, 1 lb.	1.06	1.12	1.09	.13	.13	.14	12	12	13
Peas, 1 lb.	1.02	1.01	.96	.13	.14	.14	13	14	15
Green beans, cut, 1 lb.	.97	1.02	1.00	.11	.11	.11	11	11	11
Canned and bottled—									
Peas, 17-oz. can	.48	.51	.45	.10	.11	.11	21	22	24
Corn, 17-oz. can	.44	.48	.40	.10	.10	.11	23	21	28
Applesauce, 25-oz. jar	1.02	1.01	1.05	.16	.15	.16	16	15	15
Pears, 29-oz. can	1.23	1.21	1.22	.21	.20	.23	17	17	19
Peaches, cling, 29-oz. can	1.15	1.13	1.13	.18	.18	.16	16	16	14
Apple juice, 64-oz. bottle	1.47	1.37	1.45	.30	.24	.26	20	18	18
Green beans, cut, 17-oz. can	.42	.44	.39	.06	.06	.06	14	14	15
Tomatoes, whole, 17-oz. can	.48	.50	.54	.05	.05	.04	10	10	7
Dried—									
Beans, 1 lb.	.71	.71	.63	.20	.25	.25	28	35	40
Raisins, 15-oz. box	1.53	1.60	1.64	.49	.47	.40	32	29	24
Crop products:									
Sugar, 1 lb.	.39	.38	.38	.13	.13	.13	33	34	34
Flour, wheat, 5 lbs.	1.17	1.16	1.23	.33	.36	.43	28	31	35
Shortening, 3 lbs.	2.40	2.55	2.66	.70	.84	.80	29	33	30
Margarine, 1 lb.	.80	.82	.83	.19	.24	.23	24	29	28
Rice, long grain, 1 lb.	.51	.55	.53	.08	.12	.11	16	22	21
Prepared food:									
Peanut butter, 1 lb.	1.84	1.85	1.80	.48	.48	.48	26	26	27
Pork and beans, 16-oz. can	.38	.39	.40	.06	.07	.08	16	18	20
Potato chips, regular, 1-lb. bag	1.96	1.93	1.95	.29	.30	.35	15	16	18
Chicken dinner, fried, frozen, 11 oz.	1.14	1.15	1.17	.16	.17	.17	14	15	15
Potatoes, french fried, frozen, 1 lb.	.86	.86	.86	.10	.10	.12	12	12	14
Bread, 1 lb.	.75	.76	.79	.05	.05	.06	7	7	8
Corn flakes, 18-oz. box	1.54	1.76	1.75	.09	.09	.10	6	5	6
Oatmeal, regular, 42-oz. box	2.58	2.56	2.56	.17	.16	.18	7	6	7
Corn syrup, 16-oz. bottle	1.56	1.59	1.63	.05	.06	.06	3	4	4

percent of chicken's retail price. The farm inputs needed to feed, house, and maintain the health of livestock are greater than the inputs required to grow crops. Most other foods also entail fewer inputs at the farm level.

Other factors that influence the farm value percentage include transportation costs, product perishability, and retailing costs. Higher levels of these marketing factors tend to lower the farm value percentage. These factors partly explain why the farm value percentage for fresh fruit and vegetables is relatively low, despite their relatively low processing costs. In 1995, the farm value accounted for 19.8 percent of the retail price of processed fruits and vegetables, about the same as in 1994.

Retail Prices Can Rise Even as Farm Prices Decline

Marketing costs are largely independent of farm prices, as reflected in instances where retail prices have held firm or risen even though farm prices declined. For example, the average retail price of Choice beef rose 1 cent in 1995, while the farm price dropped 8 cents. Over the years, marketing costs have tended to rise, regardless of whether farm prices rose or fell. Thus, increases in marketing costs can, and often do, exceed the effect of a reduction in farm prices on retail prices. For example, the cost of marketing 1 pound of Choice beef rose 9 cents in 1995, causing the retail price increase. Similarly, the retail price of shortening rose by 4.3 percent due to higher marketing costs, despite lower farm prices for oilseeds.

U.S. Labor Costs Rose Modestly...

Labor costs contributed nearly 70 percent of the 3.5-percent rise in 1995 marketing costs, which is consistent with long-term trends. Labor costs accounted for over a third of consumer food expenditures, about the same as in 1994 (fig. 1). Direct food industry labor costs totaled \$195.7 billion in 1995, a 5.2-percent increase from the year before (table 2). Direct labor costs are calculated for food processing, wholesaling, retailing, and foodservice, and include wages and salaries; employee benefits, such as group health insurance; estimated earnings of proprietors and family workers; and tips. These costs do not include farm labor, labor engaged in for-hire transportation of food, or labor employed in the manufacturing and distribution of supplies.

Hourly earnings of food manufacturing employees rose 2.6 percent in 1995, compared with 1994's 2.0-percent rise. The average hourly earnings of foodstore workers also rose by 2.6 percent, compared with 1.8 percent in 1994. The faster rates of increase partially reflect provisions of union contracts negotiated during the last few years that took effect in 1995. Average hourly earnings of wholesaling employees rose 2.6 percent, as they did in 1994. The average hourly earnings of eating and drinking place employees advanced 2.2 percent, the same as in 1994. Because foodservice wages are not tied to union contracts, the flat rate of increase probably reflects a lower rate of increase in foodservice sales in 1995.

Food industry employment increased 2.9 percent in 1995, roughly the same increase as in 1994. The figures reflect sluggish sales increases at foodstores, which dampened industry demand for personnel (see "Spending for Food Up Slightly in 1995," elsewhere in this issue).

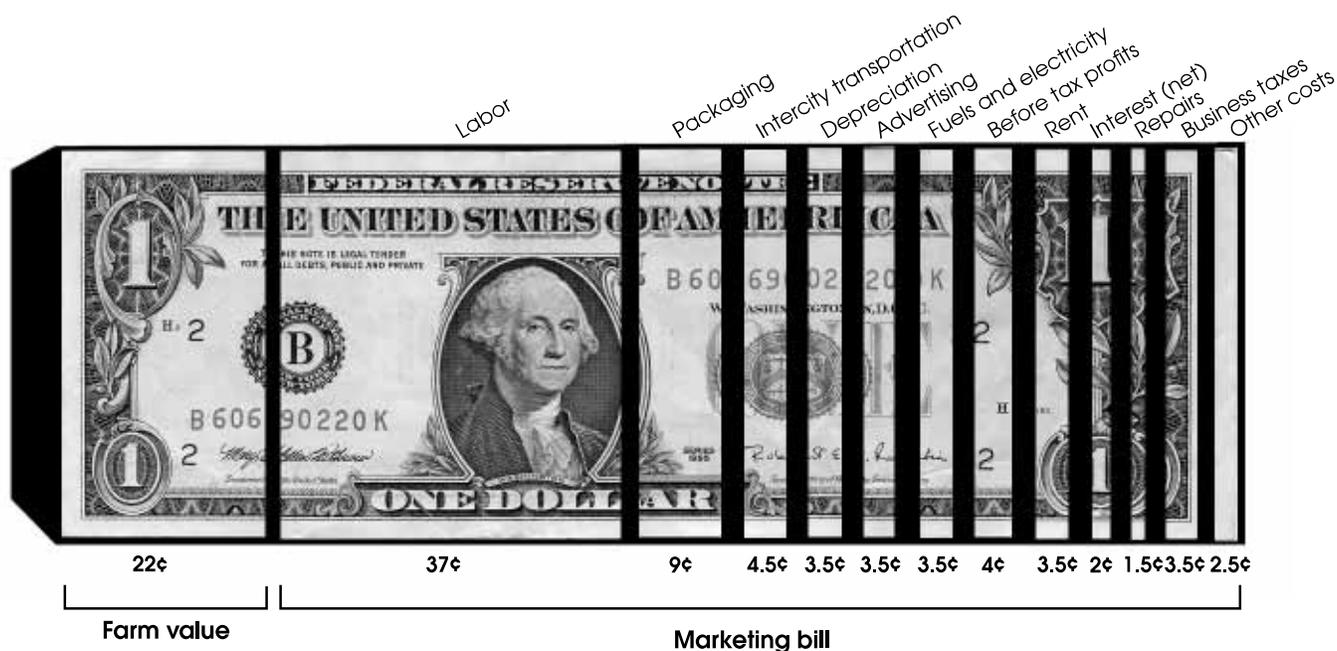
Foodstore employment increased 1.1 percent, half the rate recorded in 1994. In 1995, 13.3 million people were employed in the food sector beyond the farm. About 25 percent worked for foodstores, 13 percent for food manufacturing firms, and 7 percent for wholesalers, with eating and drinking places representing the single largest share, 55 percent. Food manufacturing employment remained at roughly constant levels, reflecting higher labor productivity and increased use of technology, which continue to dampen hiring rates.

...But Packaging Costs Shot Up

Paper and paperboard prices jumped 16 percent in 1995, which in turn caused packaging costs to surge 13 percent, by far the largest single increase of the major cost components. As a result, packaging costs rose to 9 percent of the total consumer food dollar, after holding steady at 8 percent for many years.

The jump in paper prices occurred because the U.S. paper industry did not invest in increased production capacity when prices declined between 1990 and 1993 as a result of sluggish domestic and foreign economic conditions. The paper industry could not add capacity fast enough to meet demand when conditions improved in the general economy. This inability to meet demand produced a large shortfall that caused the most rapid price increases ever seen in the industry. Increased exports of U.S. paper and paperboard due to stronger economies in Europe, Asia, and Latin America further augmented rising paperboard prices.

Figure 1
What a Dollar Spent on Food Paid for in 1995



Notes: Includes food eaten at home and away from home. Other costs include property taxes and insurance, accounting and professional services, promotion, bad debts, and many miscellaneous items.

Table 2
Labor Costs Are the Largest Share of Food Expenditures

Component	1980	1985	1990	1994	1995
<i>Billion dollars</i>					
Labor ¹	81.5	115.6	154.0	186.1	195.7
Packaging materials	21.0	26.9	36.5	43.3	49.0
Rail and truck transportation ²	13.0	16.5	19.8	21.8	22.3
Fuels and electricity	9.0	13.1	15.2	17.9	18.5
Pretax corporate profits	9.9	10.4	13.2	20.5	22.0
Advertising	7.3	12.5	17.1	19.1	19.9
Depreciation	7.8	15.4	16.3	17.9	18.5
Net interest	3.4	6.1	13.5	10.4	10.9
Net rent	6.8	9.3	13.9	18.7	19.4
Repairs	3.6	4.8	6.2	7.5	7.8
Business taxes	8.3	11.7	15.7	19.0	19.7
Other costs	11.1	16.7	22.2	20.4	13.0
Total marketing bill	182.7	259.0	343.6	402.6	416.7

Notes: ¹Includes employees' wages/salaries and health and welfare benefits. ²Excludes local hauling charges.

Higher paper prices bolstered the price of competing plastic packaging. Plastic prices rose 6.0 percent, a faster rate than the 1994 increase of 1.3 percent, although the price of petroleum used to manufacture plastics dropped 6.2 percent. Glass containers further contributed to higher packaging costs with a 2.3-percent increase, while metal can prices showed the only decline, dropping 2.7 percent.

Transportation and Energy Costs Also Rise

Intercity rail and truck transportation costs were \$22.3 billion in 1995, which was about 4.5 percent of food expenditures. The transportation cost index, which represents railroad freight rates, remained flat from 1994. Trucking rates rose 2.0 percent, reflecting higher operating costs. The cost of operating trucks hauling produce increased 1.8 percent in 1995. This increase was primarily due to higher wages, which rose 2.5 percent and accounted for nearly 30 percent of total operating costs. Overhead, insurance, and licenses account for about 27 percent of total trucking costs and rose 3.5 percent in 1995.

Energy costs associated with food marketing increased 3.5 percent to \$18.5 billion, and made up 3.5 percent of food expenditures. The energy bill primarily includes the costs of electricity and natural gas directly used for food processing, wholesaling, retailing, and foodservice. Energy costs increased despite a 1.6-percent drop in the price of electric-

ity and a 5.2-percent decline in the price of natural gas. Increased volume of marketing services also caused energy costs to rise, as reflected in the roughly equal rate of increase to the aggregate marketing bill.

Profits Grew Less Than in 1994

Pre-income-tax profits totaled \$22 billion in 1995, about 4 cents out of every food dollar. Profits rose 7.3 percent, down from 1994's 13.3-percent gain. Food processing profits were 15 percent higher in 1995, because of volume growth in highly processed foods, corporate acquisitions, and corporate restructurings. On the other hand, restaurant profits dropped 26 percent, reflecting higher labor costs, continued offerings of value meals at fast-food chains, and overbuilding, which has resulted in an excess supply of chain outlets. Foodstore profits declined about 10 percent because of weak sales. Moreover, supermarkets have been unable to pass price increases on to customers. Consumers often substitute generic brands or go to warehouse clubs that feature lower prices, rather than pay increased prices for national brands.

Advertising, Business Taxes, and Net Interest Up, Too

Advertising expenses rose 4.2 percent in 1995, following a 3.2-percent increase in 1994, and account for about 3.5 percent of food expenditures. Food manufacturing makes up 54 percent of total food industry advertising expenditures, with food-

service contributing another 26 percent, and food retailing adding 15 percent to the total. The food industry uses a mixture of print and broadcast media to promote their products.

Business taxes account for another 3.5 cents of the American food dollar. Business taxes include property, State, unemployment insurance, and Social Security taxes, but exclude Federal income taxes. Business taxes rose 3.7 percent in 1995.

Net interest accounted for only 2 percent of total consumer expenditures. Most of the increase occurred in the foodstore sector, and reflected higher debt acquired due to merger and acquisition activity, particularly leveraged buyouts. The 4.8-percent increase in interest expense in 1995 was smaller than the rise in interest rates, because long- and short-term loans booked during the last few years, when interest rates were lower, are included in the estimates.

Depreciation, rent, and repairs together totaled \$45.7 billion in 1995, accounting for 8.5 percent of the consumer food dollar. The foodservice sector incurred the highest percentage of these costs, at 41 percent of the total. Foodstores made up 27 percent, while processing firms accounted for 20 percent.

Sufficient data are not available for estimating many of the smaller individual costs, such as insurance, for-hire local truck transportation, professional services, and foodservice in school institutions. Together, these costs account for about 2.5 percent of the food dollar. ■